

**IN THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A process ~~Process~~ for producing a composite material of metallic phases, intermetallic and ceramic phases by depositing it's components by means of arc wire spraying with at least one composite wire, ~~thereby characterized, that the at least one composite wire is comprised~~ of metal or metal alloy and ceramic particles, wherein these undergo reactions during depositing forming intermetallic phases and new ceramic phases, wherein more than 70% of the ceramic particles undergo reactions during the spray processing with formation of intermetallic phases and new ceramic phases, and wherein the metal or the metal alloy, to the extent that it reacts, constitutes less than 10 vol.% of the formed composite material ~~the metal or the metal alloy and the ceramic particles during the spray process are at least in part reacted with each other with formation of intermetallic phases and new ceramic phases with strong development of heat.~~
2. (currently amended) The process ~~Process~~ according to Claim 1, wherein ~~thereby characterized, that~~ at least one ~~composite wire of metal or metal alloy and ceramic powder, as well as at least one additional~~ metallic solid wire is employed, and wherein at least one of the metallic

components of the solid wire reacts with a ceramic powder of the composite wire ~~during the depositing with formation of intermetallic phases and new ceramic phases.~~

3. (currently amended) The process ~~Process~~ according to Claim ~~1 or 2~~, wherein ~~thereby characterized, that~~ the development of exothermic heat as a result of ~~by~~ the reaction continues in part also in the newly deposited layer.
4. (currently amended) The process ~~Process~~ according to Claim ~~1 or 2~~, wherein ~~thereby characterized, that~~ the composite wire includes as metallic component at least Al, Ti, Ni, Fe, Co, Ni, Mo and/or W as metal or their alloys, as well as titanium oxide, zirconium oxide, boroxide, iron oxide, nickel oxide, silicium carbide, silicium nitride and/or borocarbide as ceramic component.
5. (currently amended) The process ~~Process~~ according to Claim 1 ~~one of the preceding Claims,~~ wherein ~~thereby characterized, that~~ the composite wire comprises a metallic coating or jacket and a ceramic filler.
6. (currently amended) The process ~~Process~~ according to Claim 1 ~~one of the preceding Claims,~~ wherein ~~thereby characterized, that~~ the composite wire includes a ceramic component of 20 to 40 vol.%.

7. (currently amended) The process ~~Process~~ according to Claim 1 ~~one of the preceding Claims,~~ wherein ~~thereby~~ characterized, ~~that~~ during the arc wire spraying intermetallic phases of at least two elements from the group Al, B, Ni, Fe, Ti, Co, Mo, W, Si, B are newly formed in the spray particles.
8. (currently amended) The process ~~Process~~ according to Claim 1 ~~one of the preceding Claims,~~ wherein ~~thereby~~ characterized, ~~that~~ during the arc wire spraying in the spray particles ceramic phases of aluminum oxide, titanium carbide, titanium boride, titanium silicide and/or titanium nitride are newly formed.
9. (currently amended) The process ~~Process~~ according to Claim 1 ~~one of the preceding Claims,~~ wherein ~~thereby~~ characterized, ~~that~~ during the arc wire spray process reactive gasses are supplied, which react with at least one of the metallic components of the at least one supplied composite wire.
10. (currently amended) The process ~~Process~~ according to Claim 8, wherein ~~thereby~~ characterized, ~~that~~ the reaction with the reactive gas leads to metal oxides and/or metal nitrides.

11. (currently amended) The process ~~Process~~ according to Claim 1 ~~one of the preceding Claims,~~ wherein ~~thereby~~ characterized, ~~that~~ after the reaction to the new intermetallic phases or ceramic phases remaining free aluminum in the deposited layer is essentially converted to aluminum oxide.
12. (currently amended) A composite ~~Composite~~ material[[,]] of metallic, intermetallic and ceramic phases by depositing it's components by means of arc wire spraying with at least one composite wire of metal or metal alloy and ceramic particles, wherein these undergo reactions during depositing forming intermetallic phases and new ceramic phases, wherein more than 70% of the ceramic particles undergo reactions during the spray processing with formation of intermetallic phases and new ceramic phases, and wherein the metal or the metal alloy, to the extent that it reacts, constitutes less than 10 vol.% of the formed composite material~~obtainable by a process according to one of the preceding claims.~~
13. (currently amended) The composite ~~Composite~~ material according to Claim 12 ~~10~~, wherein ~~thereby~~ characterized, ~~that~~ the intermetallic phases newly formed by arc wire spraying and deposited are comprised of at least two elements of the group Al, B, V, Ni, Fe, Ti, Co, Cr, Mo, W, Si or B.

14. (currently amended) The composite ~~Composite~~ material according to Claim 12 ~~10 or 11~~, wherein ~~thereby characterized, that~~ the intermetallic phases include titanium aluminide, titanium silicide, nickel aluminide, NiTi intermetallics, molybdenumsilicide and/or titanium boride.
15. (currently amended) The composite ~~Composite~~ material according to Claim 12 ~~one of Claims 10 through 12~~, wherein ~~thereby characterized that~~ the ceramic phases deposited by the arc wire spraying include oxides, nitrides, carbides, silicides and/or borides.
16. (currently amended) The composite ~~Composite~~ material according to Claim 12 ~~one of Claims 10 through 13~~, wherein ~~thereby characterized that~~ the ceramic phases newly formed and deposited by arc wire spraying include aluminum oxide, titanium carbide, titanium silicide, titanium carbide and/or titanium nitride.
17. (currently amended) The composite ~~Composite~~ material according to Claim 12 ~~one of Claims 10 through 14~~, ~~characterized by~~ wherein a ceramic content of 10 to 70 wt.% and a content of intermetallic phases of 30 to 90 wt.%, as well as a porosity of less than 7 Vol.%.

18. (currently amended) The composite ~~Composite~~ material according to Claim 12 ~~one of Claims 10 through 15~~, characterized by
- at least 50 wt.% intermetallic phases of titanium aluminides;
  - at least 20 wt.% intermetallic phases of nickel aluminides;
  - at least 20 wt.% ceramic phases of aluminum oxide; and
  - at most 5 vol.% closed porosity.
19. (currently amended) The composite ~~Composite~~ material according to Claim 12 ~~one of Claims 10 through 16~~, wherein ~~thereby characterized, that~~ it has a content of free metallic aluminum of less than 2 wt.%.
20. (currently amended) The composite ~~Composite~~ material according to Claim 12 ~~one of Claims 10 through 17~~, wherein ~~thereby characterized, that~~ it is provided deposited ~~on the substrate~~ in a thickness of greater than 5 mm on a metallic substrate.
21. (currently amended) The ~~Use of a~~ composite material according to Claim 12, wherein said material constitutes a ~~one of Claims 10 through 18 as~~ friction layer for brake components or a ~~as~~ wear resistant layer in motor vehicle.

U.S. Application No.: NEW  
PRELIMINARY AMENDMENT

Attorney Docket: 3926.198

22. (currently amended) The Use of a composite material according to Claim 12, wherein said material constitutes a ~~one of Claims 10 through 18 as~~ plating or protective layer against ballistic effect.